

## REMARKS

Claims 1-14 were pending in this application as of the Examiner's Office Action to which this Amendment is responsive. Claims 1-14 are rejected.

The below remarks are organized according to the section headings of the Examiner's Detailed Action of 2005/09/09.

### 1. Specification Objections

Applicants have re-formatted the Abstract as a single paragraph. Other than this re-formatting, applicants respectfully submit that the Abstract is already in compliance with Patent Office rules.

### 2. Claim Rejections – 35 USC § 112

Regarding claims 1, 12 and 14, the Examiner states that the phrase "electromagnetic waveform comprising a computer program" has no support in the specification. Applicants respectfully disagree and refer the Examiner to the following portion of the specification:

In some embodiments, computer programs embodying the present invention are stored in a computer readable medium, e.g. CD-ROM or DVD. In other embodiments, the computer programs are embodied in an electromagnetic carrier wave. For example, the electromagnetic carrier wave may include the programs being accessed over a network.

Specification, page 32, lines 23-27. Applicants respectfully submit that ¶1 and ¶2 of 35 USC § 112 are satisfied.

### 3. Claim Rejections – 35 USC § 102

Claims 1-14 are rejected under 35 USC § 102(b) as being anticipated by Plaisted (U.S. Patent No. 6,131,078).

Applicants refer the Examiner to the changes to independent claims 1-3 and 11-14. Applicants respectfully submit that, with the amendments, the independent claims should be allowed over the prior art of record. Since claims 4-10 are dependent claims, they are allowable for at least the same reasons as the independent claims.

While Plaisted does disclose techniques for functional decomposition, there is no teaching or suggestion in Plaisted to apply such techniques as now claimed. Specifically, the Examiner is referred to the independent claims that now limit the

invention to the generation of input stimuli for a simulation, where the input stimuli must conform to a constraint. Support for these changes to the claims can be found in the specification at such locations as page 11, lines 9-15.

Plaisted addresses the situation of verifying whether a design (or system), and a specification of the design, are equivalent (e.g., col. 1, lines 25-40 of Plaisted). The specification can be regarded as a constraint (e.g., col. 6, lines 29-00 of Plaisted). Plaisted performs such verification by combining the two designs into a Boolean function. The Boolean function is satisfiable if the design and its specification are not equivalent. Thus, Plaisted addresses the Boolean satisfiability problem. Plaisted seeks to make Boolean satisfiability more tractable by applying functional decomposition to the Boolean function.

#### 4. Summary

Applicants respectfully submit that all objections and rejections have been traversed and request a Notice of Allowance.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 502584 referencing docket number SNPS.0505.

Respectfully submitted,



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